

IN THE SPECIFICATION

Please amend the paragraph beginning at line 12 of page 9 as follows:

--An inertial measurement unit (IMU) 24 is provided which senses the changes in movement of the person being monitored. The inertial measurement sensor unit 24 includes gyroscopic sensors for angular motion and accelerometers for linear motion. The output of the inertial measurement unit 24 is provided to an inertial navigation system 26 and to a motion classification system 28. Further sensors provided on the person being monitored include an altimeter 30, which measures changes in altitude by the person. The altimeter provides its output to the motion classification system 28 and to a an input preprocessing unit 32. Magnetic sensors 34 provide direction or heading information and likewise provide its output to the motion classification system 28 and to the input preprocessing unit 32.--

Please amend the paragraph beginning at line 21 of page 9 as follows:

--The system according to the present invention has inputs in addition to those provided by the sensors of the human motion. For example, a human input 36 is

provided for landmarking, the human input 36 being provided to the input preprocessing 32. ~~On~~ One example of such a human input 36 is a keyboard and/or pointer device. An initial input unit 38 is provided to set the absolute position of the person being monitored. In addition, a Global Positioning Satellite (GPS) unit or Differential Global Positioning Satellite (DGPS) unit 40 is connected to the input preprocessing unit 32 to provide pseudo-range or delta range information. The DGPS is preferred over the GPS but requires more infrastructure. Either will work in the present application, however.--

Please amend the paragraph beginning at line 20 of page 11 as follows:

--The inertial navigation system 26 which receives data from the inertial measuring unit 24 also ~~received~~ receives data from the Kalman filter 41. The inertial navigation unit 26 outputs information on the navigation state of the person being monitored to the input preprocessing unit 32 as well as to a Position, Individual Movement unit (PIM) 48. Such a Position, Individual Movement unit 48 may have a geographic

function. The PIM unit can also be described as a
position, velocity and altitude or orientation unit.--